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DATE MAILED: 01/13/2006

| APPLICATION NO.                              | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-----------------|----------------------|---------------------|------------------|
| 10/779,730                                   | 02/18/2004      | Tumay O. Tumer       | NOVA-012-C          | 2086             |
| 28892  | 7590 01/13/2006 |                      | EXAMINER            |                  |
| SNIDER & ASSOCIATES                          |                 |                      | LE, DINH THANH      |                  |
| P. O. BOX 27613<br>WASHINGTON, DC 20038-7613 |                 |                      | ART UNIT            | PAPER NUMBER     |
|  | ,               |                      | 2816                | ÷                |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.   | Applicant(s)  | ,        |  |  |  |  |
|--|---|---|----------|--|--|--|--|
|  | 10/779,730  | TUMER ET AL.  |          |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit  |          |  |  |  |  |
|  | DINH T. LE  | 2816  |          |  |  |  |  |
| The MAILING DATE of this communication Period for Reply  | appears on the cover sheet w  | ith the correspondence address  |          |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR RE WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory per  - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the meanned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNI<br>R 1.136(a). In no event, however, may a<br>iod will apply and will expire SIX (6) MOI<br>atute, cause the application to become A | CATION. reply be timely filed NTHS from the mailing date of this communic BANDONED (35 U.S.C. § 133). |          |  |  |  |  |
| Status   |   |   |          |  |  |  |  |
| 1) Responsive to communication(s) filed on Ot  | <u> 3 November 2005</u> .   |   |          |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ⊠ T  | his action is non-final.  |   |          |  |  |  |  |
| 3) Since this application is in condition for allo   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |          |  |  |  |  |
| closed in accordance with the practice unde  | er <i>Ex parte Quayle</i> , 1935 C.E  | D. 11, 453 O.G. 213.  |          |  |  |  |  |
| Disposition of Claims  |   |   |          |  |  |  |  |
| 4)⊠ Claim(s) <u>22,23,28-34,39,44-46,48,49,53 an</u>   | d 58-92 is/are pending in the   | application.  |          |  |  |  |  |
| 4a) Of the above claim(s) is/are without   |   | •••   |          |  |  |  |  |
| 5) Claim(s) is/are allowed.  |   |   |          |  |  |  |  |
| 6) Claim(s) 22-23, 28-34, 39, 44-46, 48-49, 53   | and 58-92 is/are rejected.  |   |          |  |  |  |  |
| 7) Claim(s) is/are objected to.  |   |   |          |  |  |  |  |
| 8) Claim(s) are subject to restriction an  | d/or election requirement.  |   |          |  |  |  |  |
| Application Papers   |   |   |          |  |  |  |  |
| 9) The specification is objected to by the Exam  | iner.   |   |          |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) a   | accepted or b) objected to  | by the Examiner.  |          |  |  |  |  |
| Applicant may not request that any objection to  | the drawing(s) be held in abeya   | nce. See 37 CFR 1.85(a).  |          |  |  |  |  |
| Replacement drawing sheet(s) including the cor   | rection is required if the drawing  | (s) is objected to. See 37 CFR 1.1  | 21(d).   |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the   | Examiner. Note the attache  | d Office Action or form PTO-15  | 2.       |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |   |          |  |  |  |  |
| 12) Acknowledgment is made of a claim for fore   | ign priority under 35 U.S.C.  | § 119(a)-(d) or (f).  |          |  |  |  |  |
| a) All b) Some * c) None of: 1. Certified copies of the priority docume  | anta haya haan ragaiyad   |   |          |  |  |  |  |
| 2. Certified copies of the priority documents  |   | Application No.   |          |  |  |  |  |
| 3. Copies of the certified copies of the p   |   | · ·   | <u>.</u> |  |  |  |  |
| application from the International Bur   | •   | received in this Hational Stage   | •        |  |  |  |  |
| * See the attached detailed Office action for a  |   | received.   |          |  |  |  |  |
|  |   |   |          |  |  |  |  |
| Attachment(s)  |   |   |          |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  |   | Summary (PTO-413)<br>s)/Mail Date   |          |  |  |  |  |
| <ul> <li>2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/</li> </ul>   | 08) 5) 🔲 Notice of I  | nformal Patent Application (PTO-152)  |          |  |  |  |  |
| Paper No(s)/Mail Date  | 6) Other:   | <u></u> .   |          |  |  |  |  |

#### **NON-FINAL REJECTION**

The rejection under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 670812 is withdrawn in view of the Terminal Disclaimed filed on 3/28/05.

The rejection over Tumer (US 5,943,388) are withdrawn in view of the amendments to the claims.

## Claim Rejections

## Claim Rejections - 35 USC \_ 112

Claims 22-23, 28-34, 39, 44-46, 48-49, 53 and 58-92 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction or clarification is required.

In claim 22, the recitation "amplifier" on line 6 is confusing because it is unclear if this is additional "amplifier" or further recitation of the previously claimed "amplifier" on line 4. It is unclear how the recitation "output circuit system for outputting said processed signals responsive to said input signals" and "a polarity switching circuit is connected to said amplifiers" is read on the preferred embodiment. Insofar as understood, no such system and circuits can be determined on the drawings. The same is true for claims 28-29, 39, 46, 53 and 59.

In claim 28, it is unclear how the recitation "a peak and hold circuit coupled to output of at least one of said amplifiers" is read on the preferred embodiment. Insofar as understood, no such circuit is seen on the drawings. The same is true for reciting "comparators connected to said amplifiers" in claim 29, "a circuit connected to an output of said peak hold or sample and hold

circuit is multiplexed to said output circuit system" in claim 33, "a time difference measurement circuit" in claims 46, "pole-zero cancellation circuit" in claims 53 and 60-92.

In claim 48, it is not understood how the plurality of comparators can be a "single comparator" since the single comparator cannot be formed from the plurality of comparators.

In claim 58, the recitation "circuitry for measuring time difference" on line 2 is confusing because it is unclear if this is additional "circuitry" or further recitation of the previously claimed "measurement circuit" on line 15 of claim 46.

In claim 59, the recitation "the functions" lacks clear antecedent basis. It is unclear what the "functions" are. The description of the present invention was incomplete because the control system is not connected to anything. Thus, the claimed control circuit may not perform the recited function.

The remaining claims are dependent from the above rejected claims and therefore considered indefinite.

### Allowable Subject Matter

Claims 22-23, 28-34, 39, 44-46, 48-49, 53 and 58-92 are would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The claims are allowed because the prior art does not show the trigger circuit and the output circuit as combined in claims 22, 28, 29, 39, 46, 53 and 59.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DINH T. LE whose telephone number is (571) 272-1745. The examiner can normally be reached on Monday-Friday (8AM-7PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY CALLAHAN can be reached at (571) 272-1740.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11 January 2006

PRIMARY EXAMINER